

**REMARKS**

Claims 1-19 are currently pending in the subject application, and are presently under consideration. Claims 1-19 are rejected. New claim 20 has been added by this amendment. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

**I. Rejection of Claims 7, 9-14 and 16-19 Under 35 U.S.C. §102(e)**

Claims 7, 9-14 and 16-19 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,430,418 to Nivens, et al. ("Nivens"). New claim 20 is similar to claim 13. Accordingly, Applicant will address the patentability of new claim 20 in this section. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 7 relates to a communication station, while claim 14 relates to communications system, comprising a signal source for providing a plurality of input signals; a plurality of signal receiving stations; and a communications station. Claims 7 and 14 recite a plurality of high gain amplifiers for amplifying the intermediate signals from said variable gain amplifiers to provide output signals, a plurality of transmitting antennae for transmitting the output signals from said high gain amplifiers to a plurality of receiving stations, a plurality of monitoring power supplies for providing a voltage to each of said high gain amplifiers and for monitoring the current in each of said high gain amplifiers, permitting determination of the power provided to the output signals by said high gain amplifiers; and a power profile processor responsive to a desired power setting signal from one of the receiving stations for providing a gain signal to one of said variable gain amplifiers associated with said one of the receiving stations to adjust the gain of said one of said variable gain amplifiers so as to adjust the power provided to the output signal of the high gain amplifier associated with said one of said variable gain amplifiers.

Niven discloses controlling uplink transmission power of a user earth terminal (UET) to a satellite based on maintaining of an error count at the satellite at a predetermined level. The

error rate is the number of transmission errors per data bit detected by the satellite's error detecting decoder and the error count is the actual number of errors detected in a particular data signal, which is generally a function of the UET's transmit power level.

Nivens discloses UET having one VGA 224 (See Nivens, FIG. 2) as the UET only has one data signal 218. Nothing in Nivens discloses that the UET includes a plurality of VGAs for amplifying respective input signals to provide intermediate signals, as recited in claims 7 and 14. Additionally, the UET disclosed in Nivens is shown to have one high power amplifier 228 and one transmitting antenna 232 (See Nivens, FIG. 2). That is, Nivens also does not disclose a plurality of high gain amplifiers for amplifying intermediate signals from a plurality of VGAs to provide output signals or a plurality of transmitting antennae for transmitting output signals from the high gain amplifiers to a plurality of receiving stations, as recited in claims 7 and 14.

Furthermore, Nivens does not disclose a plurality of monitoring power supplies for providing a voltage to each of a plurality of high gain amplifiers and for monitoring current at each of the plurality of high gain amplifiers, permitting determination of power provided to the output signals by the plurality of high gain amplifiers, as recited in claims 7 and 14. Additionally, Nivens does not disclose a power profile processor responsive to a desired power setting signal from one of the receiving stations for providing a gain signal to one of said variable gain amplifiers associated with said one of the receiving stations, as recited in claims 7 and 14.

In Nivens, transmission power at the UET is adjusted based on the error count of the transmission determined at the satellite, which is subsequently returned to the UET. Therefore, Nivens does not disclose a plurality of monitoring power supplies that monitor current for each of a plurality of high gain amplifiers, and does not disclose a power profile processor responsive to a desired power setting signal from one of the receiving stations for providing a gain signal to one of said variable gain amplifiers associated with said one of the receiving stations, as recited in claims 7 and 14.

Claims 9-13 depends from claim 7 and are not anticipated by the cited art for at least the same reasons as claim 7 and for the specific elements recited therein. Accordingly, claims 9-13 should be patentable over the cited art.

Additionally, regarding claim 10, Nivens does not disclose an input circuit that comprises a receiving antenna for receiving a composite input signal from a transmitter, and a demodulator for separating the composite input signal into a respective input signals and apply the respective input signals to VGAs, as recited in claim 10. In rejecting claim 9, from which claim 10 depends, the Examiner contends that that data signals 231 and input signal 237 disclosed in Nivens, corresponds to the input signal recited in claim 9 (See Office Action, Page 3). None of the data signals disclosed in Nivens includes a demodulator for separating the composite input signal into a respective input signals and apply the respective input signals to VGAs, as recited in claim 10. Accordingly, Nivens does not disclose each and every element of claim 10.

Furthermore, regarding claim 11, Nivens does not disclose an input circuit that comprises a plurality of low noise amplifiers for amplifying respective input signals from a demodulator and applying the results to VGAs, as recited in claim 11. Nivens does not disclose any structure that corresponds to the low noise amplifiers recited in claim 11. Accordingly, Nivens does not disclose each and every element of claim 11.

Further still, regarding claim 13, Nivens does not disclose that VGAs, high gain amplifiers, transmitting antennas and monitoring power supplies, and a power profile processors are within a communications satellite, as recited in claim 13. In Nivens, VGA 224, high power amplifier 228 and power profile processor 216 are all clearly part of a UET (See FIG. 2 of Nivens). Accordingly, Nivens does not teach or suggest each and every element of claim 13.

Claims 16-20 depend either directly or indirectly from claim 14 and not anticipated by the cited art for at least the same reasons as claim 14, and for the specific elements recited therein. Additionally, claims 17, 18 and new claim 20 are similar to claims 10, 11 and 13, respectively, and are not anticipated for substantially the same reasons as claims 10, 11 and 13. Accordingly, claims 16-20 should be patentable over the cited art.

For the reasons described above, claims 7, 9-14 and 16-20 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

## **II. Rejection of Claims 1-6 Under 35 U.S.C. §103(a)**

Claims 1-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nivens in view of U.S. Patent No. 5,574,747 to Lomp ("Lomp"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 1 is not made obvious by Nivens in view of Lomp. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). In contrast to the contention of the Office Action, Nivens does not teach or suggest determining whether power needed for a desired power setting is available, if the power needed for the power setting is available then adjusting the power settings to provide the desired power settings, as recited in claim 1. Nivens discloses that a 1 decibel (dB) increase in transmit power may not be sufficient, and if it is not sufficient, then additional "above" error reports will result in further power increases until the error count is sufficiently low (See Nivens, Col. 10, Line 59-Col. 11, Line 2). However, nothing in Nivens teaches or suggests determining whether power needed for a desired power setting is available, as recited in claim 1.

The addition of Lomp does not make up for the aforementioned deficiencies of Nivens. Additionally, in contrast to the contention of the Office Action, Lomp does not teach or suggest that if power needed for a desired power setting is not available, determining load priorities of the transmitters, and if there is sufficient power for determining load priorities, adjusting the power settings to provide power based on load priorities, as recited in claim 1. Lomp discloses a system for adaptive power control of a spread spectrum transmitter of a mobile unit operating in a cellular communications network (See Lomp, Abstract). Lomp also discloses obtaining a common value obtained for signal to noise ratio versus load and its associated cost to the transmitters in terms of transmitting power (See Lomp, Col. 16, Lines 37-40). However, Lomp does not teach or suggest any load priorities. Accordingly, Lomp does not teach or suggest that

if power needed for a desired power setting is not available, determining load priorities of the transmitters, and if there is sufficient power for determining load priorities, adjusting the power settings to provide power based on load priorities, as recited in claim 1. Thus, taken individually, or in combination, Nivens and Lomp do not teach or suggest each and every element of claim 1. Consequently, Nivens and Lomp do not make claim 1 obvious. Therefore, claim 1 should be patentable over the cited art.

Claims 2-3 depend from claim 1 and are not obvious for at least the same reasons as claim 1, and for the specific elements recited therein. Accordingly, claims 2-3 should be patentable over the cited art.

Additionally, regarding claim 2, neither Nivens nor Lomp, taken individually or in combination, teaches or suggests a desired power setting of each of the transmitters is determined by receiving a sent power indication of the transmitter, determining the power received from the transmitter, determining the propagation loss for the transmitter based on the sent power indication and the received power, and determining the desired power setting based on the propagation loss, as recited in claim 2. Applicant respectfully submits that the Office Action does not address the patentability of claim 2. Nothing in Nivens or Lomp teaches or suggests that a desired power setting of each transmitter is determined by receiving a sent power indication of the transmitter, as recited in claim 2. In Nivens, the UET only receives the error report 209 (See Nivens, FIG. 2). Thus, taken individually or in combination, Nivens and Lomp do not teach or suggest each and every element of claim 2.

Further still, claim 3 recites a desired power setting of each of the transmitters is determined by receiving a sent power indication of the transmitter, determining a signal to noise ratio of the transmitter, determining the propagation loss for the transmitter based on the signal to noise ratio; and determining the desired power setting based on the propagation loss. Claim 3 should be allowable for similar reasons as claim 2. Accordingly, Nivens and Lomp, taken individually, or in combination do not teach or suggest each and every element of claim 3, for substantially the same reasons as claim 2.

Claim 4 recites an article comprising a storage medium having instructions stored thereon, the instructions, when executed, substantially perform the elements recited in claim 1. Accordingly, claim 4 is not obvious for substantially the same reasons as claim 1. Thus, claim 4 should be patentable over the cited art.

Claims 5-6 depend from claim 4 and are not obvious for at least the same reasons as claim 4 and for the specific elements recited therein. Additionally, claims 4 and 5 are similar to claims 2 and 3 and are not obvious for substantially the same reasons as claims 2 and 3. Thus, claims 4 and 5 should be patentable over the cited art.

For the reasons described above, claims 1-6 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

### **III. Rejection of Claims 8 and 15 Under 35 U.S.C. §103(a)**

Claims 8 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nivens in view of Lomp as applied to claims 1-7, 9-14 and 16-19, and further in view of U.S. Publication No. 2004-0224633 to Corominia, et al. ("Corominia"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claims 8 and 15 depend from claims 7 and 14, respectively. Claims 7 and 14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nivens, not as being made obvious by Nivens in view of Lomp, as contended in this rejection. Applicant will thusly not consider Lomp in responding to the rejection of claims 8 and 15.

Corominia does not make up for the aforementioned deficiencies of Nivens with respect to claims 7 and 14 from which claims 8 and 15 depend, respectively. Therefore, claims 8 and 15 should be patentable over the cited art.

For the reasons described above, claims 8 and 15 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

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**CONCLUSION**

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

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